

**Yuval Dorfan** [dorfany@gmail.com](mailto:dorfany@gmail.com)

**Senior lecturer, HIT, Holon, Israel**

Google scholar profile: <https://scholar.google.co.il/citations?user=ai3TZyoAAAAJ&hl=en>

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### **Education:**

**PHD** 10/2013-8/2017, supervised by Prof. Sharon Gannot: "Distributed Localization and Tracking of Acoustic Sources", Bar-Ilan University, Ramat-Gan, Israel. Won a best paper award. Lead a few acoustic projects including their funding aspects. Supervised undergraduate and graduate students. Established a few collaborations with other leading signal processing groups from United Kingdom (UK), France, Germany & Singapore.

**MBA**, 2005-2007, Inter Disciplinary Center (IDC), Herzelia, Israel. Entrepreneur of a new company, Medichack for acoustic sensing of pneumonia for babies.

**M.Sc.** (magna cum laude) in electrical engineering 1998-2001, supervised by Prof. Arie Feuer and Prof. Boaz Porat (of blessed memory): "Modeling and Identification of LPTV Systems by Wavelets", Technion, Haifa, Israel. Won a few prizes.

**B.Sc.** (summa cum laude) in electrical and computer engineering (signal processing, communication, and control), 1994-1998, supervised by Prof. Israel Rotman and Dr. Ayelet Pnueli, Ben Gurion University (BGU), Ber-Sheva, Israel. Won a few prizes.

### **Professional experience:**

**2022 – Now: Senior lecturer and founding bio-convergence excellence center, HIT, Holon, Israel.**

- Teaching in courses of electrical engineering, Signal & systems
- Leading integrative applied research.
- Grants and papers with industry and academia, including ZMI, Prof. Dov Greenbaum and other PIs from universities in Israel and abroad.
- Holistic research to enable new companies including old landmine detection and biochip to monitor air / water contaminations.
- Advisor to Alagene, the first Israeli bio-foundry supported by the Israeli Innovation Authority (IIA), who declared it as a national facility for SynBio local community with initial budget of 40Mnis for a ramp-up phase.
- Undergrad and grad students projects supervision.

**2020 – 2022: Israeli SynBio Institute (ISI) founding director, Innovation Center, IDC, Herzliya, Israel.**

- Founding director of ISI as part of the innovation center, close partnership with Prof. Noam Lemelshtrich Latar & Dr. Jonathan Giron.
- Leading integrative applied research in IDC with multiple schools: law, communication, computer science, etc.
- Grants and papers with industry and academia, including ZMI, Prof. Dov Greenbaum and other PIs from universities in Israel and abroad.

- Holistic research to enable new companies including old landmine detection and biochip to monitor air / water contaminations.
- Founding Alagene, the first Israeli bio-foundry with hylabs (a bio-tech company from Rehovot) and Michael Eisenberg (private funder) supported by the Israeli Innovation Authority (IIA), who declared it as a national facility for SynBio local community with initial budget of 40Mnis for a ramp-up phase of two years.

**2017 – 2020: Research scientist, Voigt laboratory in biological engineering at MIT, Cambridge, MA, USA.**

- Managing a DARPA research project, Synergistic Discovery and Design (SD2):
  - Managing 4 research groups (MIT, Broad institute, Utah University & Boston University) on a few research tasks (Bio-cyber-security, Genetic circuits, RNA-seq, Soil bacteria design & various software (SW) tools for synthetic biology).
  - Weekly meetings with researchers from academia & industry (various locations around the USA).
- Initiated and managing a 1M\$ project as a collaboration between Israel & MIT: Soil project for agriculture.
- Co-founding ISI in RU, Herzliya, Israel with Prof. Chris Voigt, Dr. Ben Gordon & other partners.

**2013 – 2017: PHD research and studies, Speech and signal processing laboratory in the faculty of engineering at Bar-Ilan University, Ramat-Gan, Israel.**

- Development of new distributed expectation-maximization (EM) algorithms for acoustic source localization, tracking & source separation.
- Co-operation with industry & other research groups in Israel, Europe, UK and Singapore including visits to Grenoble and London.
- Raising money from industry and other funding sources.
- Supervision of master students.

**2009 – 2017: Algorithms & system engineering (Signal processing & communication), Israel Aerospace Industries (IAI), Beer-Yaacov, Israel.**

- Planning RF communication systems.
- Development of signal processing algorithms for communication, acoustic, GPS, etc.
- Projects supervision in signal processing with TAU.

**2006 – 2011: Assistance, Weizmann Institute of Science, Rehovot, Israel.**

- Research in bioinformatics.
- MATLAB course for graduated students.

**2008 – 2009: R&D manager, Telesen, Rosh-Ha'ayen, Israel.**

- Leading a wrist pulse measurement project by optics & acceleration sensor.
- Recruiting a team, system definition & algorithms development.
- Patents mapping, interactions with other companies & academia (Technion & BGU).

**2007 – 2008: System engineering Wimax/WiFi project, Intel, Haifa, Israel.**

- Definition of multi-standard communication system.
- Leading integration stages including automatic calibrations algorithms.

**2001 – 2006: Team leader and senior PHY engineer in cellular communication projects, Comsys communication & signal processing (now Intel), Herzelia, Israel.**

- Recruiting, training & management of a team.
- Algorithms research, development & implementation.
- Co-operations establishment with academy (Technion, TAU & BGU) and companies (Rafael, Allvarion etc.).

**2004 – 2005: Project manager and team leader, Negevtech, Rehovot, Israel.**

- Recruiting, training & management of a team.
- Innovative R&D in image processing including a patent.
- Responsibility for a multi-disciplinary project (SW, HW, optics & application).

**1998 – 2001: Teacher assistance and projects supervisor, Technion, Haifa, Israel.**

- Leading signal processing research of students from Israel & Europe.
- Teaching assistance in two courses.
- Projects supervision in signal & image processing in academic & industrial areas (Applied Materials, Nahal-Sorek, Elbit etc.). One of them won a prize.